Chapter 15

Environmental Performance, Policy and Implementation

Environmental Performance, Policy and Implementation

1. Introduction

The 2016 state of the environment report identified the need to improve the tracking of plans and policies and the implementation of environmental legislation as one of the seven key environmental challenges for Ireland (EPA, 2016). The European Commission recognises that the poor implementation of environmental law and policies has many negative effects, including environmental, economic and social costs, an unequal playing field for economic operators, and the loss of credibility of both national authorities and the European Union (EU). It estimates that the full implementation of EU environmental legislation could save the EU economy around €55 billion every year in health costs and direct costs to the environment (EC, 2019a).

Improve the tracking of plans and policies and the implementation and enforcement of environmental legislation to protect the environment.

This chapter provides a summary assessment of the current state of implementation of environmental legislation, policy, plans and programmes in Ireland and examines the outlook for Ireland in terms of achieving full compliance with commitments and targets within five core policy areas: climate, air, nature, water and waste. Some aspects relating to sustainable development, key global trends and emerging issues are also covered. The chapter concludes with some suggested mechanisms for improving the implementation and integration of environmental policy, plans and programmes in Ireland.

Ireland's Environmental Legislation and Policy Landscape

The majority of Ireland's environmental laws stem from European directives.

Ireland has a range of laws and policies designed to protect air and water, safeguard nature, address climate change and promote the circular economy and sustainable development. Some of the key laws and policies are shown in Figure 15.1. Most of Ireland's environmental laws stem from European directives and regulations (which themselves may stem from United Nations (UN)/ international obligations, such as the Paris Agreement). They commit Ireland to binding targets and objectives, which are implemented via a range of national plans and programmes, such as the River Basin Management Plan (RBMP), the National Air Pollution Control Programme (NAPCP) and the Climate Action Plan.

Ireland's Sectoral Policies, Plans and Programmes

Successfully integrating environmental considerations into sectoral plans and programmes is challenging. A proactive approach is needed to integrate environmental considerations into all sectoral policymaking.

There is increasing recognition that achieving the desired environmental objectives set for air, water, climate, etc., requires the necessary pollution prevention and control measures and actions to be fully incorporated across sectoral decision-making and policymaking at all levels, including, for example, agriculture, fisheries, built environment, tourism, forestry, energy and transport. Some of the key sectoral plans and programmes currently in place in Ireland are listed in Figure 15.2. The need for greater and more consistent integration of environmental considerations into sectoral policymaking is well recognised (e.g. OECD, 2019; UN, 2019). This issue is discussed further towards the end of this chapter, under 'Improving implementation and integration'.

Aerial view of Galway city

Figure 15.1 Summary of key selected environmental legislation, policies and plans in place in Ireland across the key thematic areas

Climate Action

Objectives
Reduce greenhouse gas emissions, improve energy efficiency and renewable energy, assess and manage adaptation to climate change

Global
- UN Framework Convention on Climate Change
- Paris Agreement
- Kyoto Protocol

European Directives and Policies
- EU Green Deal
- 2020 Climate and Energy Package
- 2030 Climate and Energy Framework
- Emissions Trading Directive
- Effort Sharing Regulation
- Floods Directive
- EU Strategy on Adaptation to Climate Change
- LULUCF Regulation (EU 2018/841)

Draft/in preparation:
- EU Climate Law

National Policies/Plans
- Climate Action and Low Carbon Development (Amendment) Bill 2020
- Climate Action Plan (2019)
- National Mitigation Plan (2017)
- National Adaptation Framework (2018)
- National Policy Position on Climate Action and Low Carbon Development (2013)
- Climate Action and Low Carbon Development Act (2015)
- Sectoral adaptation and mitigation plans (various)
- National Energy and Climate Plan (2021-2030)

Local/regional plans
- Local authority Adaptation Plans (2019) and Low Carbon Roadmaps
- Flood Risk Management Plans

Air Quality

Objectives
Maintain and improve air quality and reduce emissions of specified air pollutants to protect human health and the environment

Global
- UN Air Convention (also known as the Convention on Long-range Transboundary Air Pollution)

European Directives and Policies
- EU Green Deal
- Clean Air Package
- CAFE Directive
- National Emission Ceilings Directive
- Emissions directives e.g. Industrial Emissions Directive, Vehicle (Euro) Emission standards, Ecodesign Directive for stoves

National Policies/Plans
- National Air Pollution Control Programme (2019)

Draft/in preparation:
- National Clean Air Strategy

Local/regional plans
- Low Smoke Zones

Nature

Objectives
Protect and conserve Ireland's natural heritage and biodiversity, including designated species and habitats

Global
- Convention on Biological Diversity and associated Strategic Plan for Biodiversity 2011-2020
- Bonn Convention
- Ramsar Convention on Wetlands of International Importance
- Convention on International Trade in Endangered Species of Wild Fauna and Flora

European Directives and Policies
- EU Green Deal
- Habitats Directive
- Birds Directive
- EU Biodiversity Strategy for 2030
- Marine Strategy Framework Directive

National Policies/Plans
- National Biodiversity Action Plan (2017-2021)
- All-Ireland Pollinator Plan (2015-2020)
- National Peatlands Strategy 2015
- National Raised-Bog SAC Management Plan 2017

Local/regional plans
- Local authority Biodiversity Action Plans and Green Infrastructure Strategies

Water Quality

Objectives
Improve and maintain good water quality, including groundwater, rivers, lakes, estuaries, coastal waters and bathing waters

Global
- OSPAR Convention
- MARPOL Convention

European Directives and Policies
- Water Framework Directive
- Marine Strategy Framework Directive
- Bathing Water Directive
- Groundwater Directive
- Nitrates Directive
- Urban Waste Water Treatment Directive

National Policies/Plans
- River Basin Management Plan (RBMP) (2018-2021)
- Nitrates Action Programme
- Marine Strategy Framework Directive Programme of Measures

Local/regional plans
- Priority areas for action (under the RBMP)

Waste and Circular Economy

Objectives
Reduce waste generation, improve waste management and promote more efficient resource use

Global
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

European Directives and Policies
- EU Green Deal
- Circular Economy Action Plan
- Waste Framework Directive
- Individual producer responsibility directives on Packaging, WEEE, End-of-life Vehicles, Batteries and Accumulators, etc.
- Landfill Directive
- Waste Shipment Regulation
- Single-use Plastics Directive

National Policies/Plans
- National Waste Policy 2020-2025, A Waste Action Plan for a Circular Economy
- Climate Action Plan (2019)
- National Waste Prevention Programme (last reviewed 2018)
- National Hazardous Waste Management Plan (2014-2020)

Local/regional plans
- Regional Waste Management Plan 2015-2021
- Litter management plans

Cross-cutting and Integrated Environmental Assessment

Objectives
Improve environmental protection and promote sustainable development

Global
- UN Sustainable Development Agenda 2030
- Landscape Convention

European Directives and Policies
- EU Green Deal
- Industrial Emissions Directive
- Strategic Environmental Assessment Directive
- Environmental Impact Assessment Directive
- Environmental Liabilities Directive
- Common Agricultural Policy

National Policies/Plans
- National Implementation Plan for the Sustainable Development Goals (2018-2020)
- Our Sustainable Future (2012)
- Project Ireland 2040
- National Landscape Strategy
- EPA Enforcement and Compliance Policy

Local/regional plans
- Local authority Landscape Character Assessments

CAFE, Clean Air for Europe; LULUCF, land use, land use change and forestry; MARPOL Convention, International Convention for the Prevention of Pollution from Ships; OSPAR Convention, Convention for the Protection of the Marine Environment of the North-East Atlantic; SAC, Special Area of Conservation; WEEE, waste electrical and electronic equipment.

Figure 15.2 Overview of some of the important sectoral policies, plans and programmes in place in Ireland

a *Guidance on Strategic Environmental Assessment is available from the EPA. See http://www.epa.ie/monitoringassessment/assessment/sea/*

b *Guidance on Appropriate Assessment is available from the National Parks and Wildlife Service. See https://www.npws.ie/protected-sites/guidance-appropriate-assessment-planning-authorities*

c *Guidance on Environmental Impact Assessment is available from the Department of Housing, Local Government and Heritage and the EPA. See http://www.epa.ie/pubs/advice/eal and https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal*

CAP, Common Agricultural Policy; EPA, Environmental Protection Agency; SAC, Special Area of Conservation; SDZ, strategic development zone.

2. European Assessment of Ireland's Environmental Performance

The European Commission's 2019 Environmental Implementation Review

The latest European Commission Environmental Implementation Review (EIR) paints a mixed picture of Ireland's environmental performance.

The Commission launched the EIR as a tool to identify implementation issues within Members States at an early stage and seek solutions before issues reach the stage of infringements. The EIR comprises a 2-yearly cycle of analysis, dialogue and peer-to-peer support. The second EIR package, adopted in April 2019, includes 28 country reports, which map progress since the first EIR in 2017 and contain priority actions for each Member State.

Ireland's EIR for 2019 (EC, 2019b) notes that, in general, the country has good air quality, its soils are in good condition (with the exception of peat areas) and important steps have been taken towards a circular economy. It found that some progress has been made on the designation of Special Areas of Conservation (SACs) and on drawing up conservation objectives for these sites, on air quality and reducing emissions, and on waste policy in applying economic instruments.

The EIR for 2019 also identified several examples of good practice from Ireland, including good use of EU co-financing for environmental projects, especially through the LIFE programme and European Investment Bank loans, a very strong track record in environmental research and development and the availability of geographic information system data on ecosystems and their services.

Despite the progress made, the EIR found that Ireland faces a number of significant environmental challenges, notably in the areas of water management, nature protection and access to justice. It noted that Ireland's water services continue to cause concern, as evidenced by a low compliance rate with the Urban Waste Water Treatment Directive (91/271/EEC), problems with drinking water and below-average bathing water quality, while both the abstraction of water and hydromorphological changes are still not well controlled. The EIR identified that the significant gaps remaining in Ireland's designation of SACs need to be addressed and conservation measures be established for all sites as a priority. It noted that, although Ireland has made progress in finalising the National Raised Bog SAC Management Plan and on protecting raised bogs, only slow progress has been made in protecting blanket bog sites. A number of priority actions for Ireland are identified in the EIR in the areas of water, air, nature, waste and the circular economy, and access to justice; these are highlighted in topic boxes throughout this chapter.

Infringement Procedures for Breach of European Environmental Law

Open infringement and European court cases against Ireland for breaches of environmental law mainly relate to failures in implementing nature, water and Environmental Impact Assessment (EIA) legislation.

The Commission has the power to bring legal action – an infringement procedure – against Member States for failing to implement EU environmental law. These procedures can arise on the basis of the Commission's own investigations or following complaints from citizens, businesses or other stakeholders. Infringement procedures follow a number of formal steps that require engagement between the Commission and the Member State. If the Member State fails to remedy the breach of European law, the Commission may decide to refer the matter to the European Court of Justice, which, in certain cases, can impose financial penalties. Most cases are resolved before being referred to the Court.

Unresolved infringements indicate ongoing structural, administrative and legislative deficiencies in the implementation of environmental legislation and can be damaging to Ireland's international reputation. As of 10 November 2020, there were 16 infringement cases and four European Court of Justice cases open against Ireland for breaches of environmental law, mainly relating to failures in implementing legislation on nature, water, EIAs and access to justice (Table 15.1).

There are four current infringement cases under EU nature legislation, which relate to (1) a failure to classify Special Protection Areas (SPAs) under the Birds Directive (2009/147/EC; infringement 1998/2290 and C-418/04 – *Commission v Ireland*); (2) peat extraction in the Habitats Directive (92/43/EEC) protected areas (infringement 2010/2161); (3) the designation of SACs under the Habitats Directive (infringement 2015/2006, referred to Court 2 July 2020); and (4) the failure to establish penalties under European Commission Invasive Alien Species Regulations (infringement 2018/2319). With regard to EU water legislation, there are four current infringements, which relate to (1) non-conformity and shortcomings in the transposition of the Water Framework Directive (2000/60/EC; infringement 2007/2238); (2) a failure to comply with the Urban Waste Water Treatment Directive (infringement 2013/2056 and C-427/17 – *Commission v Ireland*); (3) a failure to comply with the Drinking Water Directive (98/83/EC) due to exceedances of trihalomethanes (THMs) (infringement 2017/4007); and (4) a failure to meet obligations on environmental quality

standards for pollutants under the Priority Substances Directive (2455/2001/EC; infringement 2019/2286). There are currently three open infringements relating to EIA legislation: (1) implementation of the EIA Directive (2014/52/EU) in relation to projects in or likely to affect Natura 2000 sites (infringement 2000/4384 and C-215/06 – *Commission v Ireland*); (2) a failure to take account of new modifications to the EIA Directive (infringement 2017/0368); and (3) EIA and peat extraction activities (infringement 2019/4007). With regard to access to justice legislation, current infringements relate to (1) access to justice provisions under the Industrial Emissions Directive (2010/75/EU) and EIA Directive (2011/92/EU) (infringement 2012/4028) and (2) the Environmental Liability Directive (2004/35/EC) (infringement 2020/2110).

The remaining three open infringements relate to EU chemicals legislation (non-conformity with Seveso-III Directive (2012/18/EU; infringement 2019/2275)), marine legislation (late reporting on updates under the Marine Strategy Framework Directive (2008/56/EC; infringement 2018/2359)) and climate action legislation (Directive 2018/410/EU amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (2019/0327)).

The number of open infringements fluctuates over time, as existing infringement procedures are closed and new ones are opened. Updated information on infringements is available on the Commission website (https://ec.europa.eu/info/law/infringements_en). Closing the current infringement procedures, and avoiding future ones, will require proactive action and prioritised legislation and enforcement by the government and public authorities in Ireland.

The 2019 EIR notes that access to justice remains an issue in Ireland. The Commission has recommended that Ireland should make an effort to lower the cost of bringing an environmental legal action to court and better inform the public about their rights to access justice, notably in relation to air pollution and nature (Topic Box 15.1).

Table 15.1 Summary of active and closed infringements proceedings against Ireland for breaches of EU environmental legislation (Source: European Commission)

	NUMBER OF ACTIVE INFRINGEMENTS (TO 10 NOVEMBER 2020)		NUMBER OF CLOSED INFRINGEMENTS (1 JANUARY 2002 TO 10 NOVEMBER 2020)
	Infringements	European Court of Justice cases	
Nature	4	2	11
Water	4	1	16
EIA	3	1	9
Chemicals	1	0	8
Marine	1	0	0
Climate action/floods	1	0	7
Access to justice/justice	2	0	2
Waste	0	0	33
Air	0	0	19
Other	0	0	7[a]
Total	**16**	**4**	**112**

[a] *The 'other' closed infringements comprised three relating to the Seveso Directive and one each relating to noise (non-transposition of Directive 2002/49/EC), the INSPIRE Directive (failure to fulfil reporting obligations), the Integrated Pollution Prevention and Control Directive (reporting obligation) and the Nagoya Protocol on Access to Genetic Resources.*

Topic Box 15.1 Priority Actions for Ireland on Information, Public Participation and Access to Justice, as Identified by the European Commission (EC, 2019b)

- Identify and document all spatial datasets required for the implementation of environmental law, and make the data and documentation at least accessible 'as is' to other public authorities and the public through the digital services foreseen in the INSPIRE Directive.
- Better inform the public about their rights to access justice, notably in relation to air pollution and nature.
- Ensure that individuals and environmental non-governmental organisations can bring environmental challenges without facing prohibitive costs, including in nature and air quality cases.

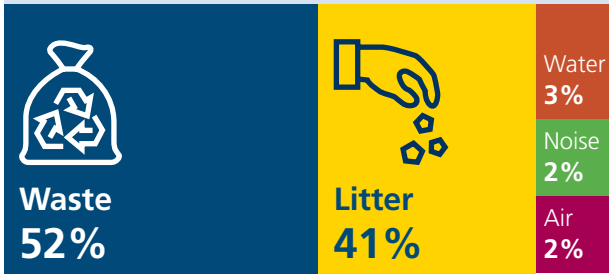
3. Assessment of Ireland's Performance Against Environmental Legislation, Plans and Programmes

Environmental Enforcement Performance of Local Authorities

The EPA has designed a Performance Framework to help local authorities to continue to improve their work in environmental enforcement.

The EPA's latest report on local authority environmental enforcement performance found that local authorities increased their environmental enforcement activities in 2018 (EPA, 2020a). They also handled and investigated an increased number of environmental complaints (over 78,000) in 2018, mainly relating to waste and litter issues (Figure 15.3). The EPA also receives complaints in relation to how local authorities carry out their environmental duties – over 1100 of these complaints were received by the EPA in 2018.

Figure 15.3 Breakdown of the environmental complaints received by local authorities directly in 2018



Several areas where local authorities could improve environmental enforcement were identified in the EPA report, as follows:

- ensure waste is segregated at source by businesses and householders to improve recovery
- improve sharing of information on waste enforcement to ensure that illegal waste activities can be detected and prevented
- increase farm inspection numbers to previous levels at a minimum, to improve water quality (e.g. there were about 650 fewer farm inspections undertaken in 2018 than in 2017)
- coordinate action and increase enforcement of the Solid Fuel Regulations[1] to improve air quality.

The challenge posed by increasing shared service delivery and the need to better coordinate and cooperate to deliver national environmental enforcement priorities were also identified in the report.

1 *S.I. No. 326/2012 – Air Pollution Act (Marketing, Sale, Distribution and Burning of Specified Fuels) Regulations 2012d.*

Enforcement of EPA-licensed Industrial and Waste Facilities

Most environmental complaints relate to odour and noise.

The EPA's latest industrial and waste licence enforcement report 2018 examines the overall performance of regulated industrial and waste licensed facilities (EPA, 2018). It highlights that, overall, the level of compliance among industrial and waste licensed sites in 2018 was good and that the EPA's National Priority Sites system is continuing to drive investment and environmental improvements at licensed sites, as discussed in Chapter 10. This is borne out in a 22 per cent reduction in the number of complaints received in 2018, a downwards trend that continued in 2019. Of the 900 environmental complaints received in 2018, the majority (84%) related to odour and noise. Most complaints related to ten facilities in the food and drink and the waste transfer/landfill sectors. The report identified a number of areas for improvement:

- The food and drink (agri-food) sector continues to face challenges in maintaining environmental compliance as the industry adapts to increased agricultural production.
- Complaints from members of the public remain an issue for the waste sector.

At the end of 2019, over 60 EPA-licensed sites were identified as significant pressures to either groundwater or surface water bodies under the Water Framework Directive second-cycle RBMP.

Ireland's Performance on Climate

Unlike most European countries, Ireland has not reduced greenhouse gas emissions.

Ireland's climate policy is rapidly evolving. The 2015 Climate Action and Low Carbon Development Act created statutory obligations for successive 5-yearly National Mitigation Plans, detailing actions required to achieve Ireland's greenhouse gas mitigation obligations. Ireland's first National Mitigation Plan was adopted in 2017 with the aim of closing the gap towards Ireland's 2020 targets and preparing for the 2030 targets. It contains separate sectoral mitigation measures for the electricity generation, transport, built environment and agriculture sectors. It was, however, criticised for not setting out a sufficiently clear roadmap for how the necessary reductions are to be achieved and was subsequently found by the Supreme Court in July 2020 not to meet the requirements of the 2015 Climate Action and Low Carbon Development Act. In 2019 the government published its Climate Action Plan (Government of Ireland, 2019), which is aimed at enabling Ireland to meet its 2030 emissions reduction targets and laying the foundations for achieving climate neutrality by 2050. Further detail on the targets and measures included in the Climate Action Plan is provided in Chapter 2. As part of a commitment to updating the 2015 climate legislation by establishing a 2050 target in law, introducing a new regime for carbon budgets and strengthening the role of the Climate Change Advisory Council, the government also intends to provide a statutory basis for the Climate Action Plan in law and published a Climate Action (Amendment) Bill in October 2020.

Alongside these national developments, the EU 2030 Climate and Energy Framework adopted in 2014 commits Member States to preparing 10-year rolling National Energy and Climate Plans (NECPs). These provide a new framework within which governments must plan their climate and energy objectives, targets, policies and measures in an integrated manner. The first NECPs for 2021-2030 must ensure that the EU's 2030 targets for greenhouse gas emissions reductions, renewable energy, energy efficiency and electricity interconnection are met. Ireland's NECP, published in August 2020, incorporates all planned policies and measures that were identified up to the end of 2019 and that collectively will deliver an anticipated 30 per cent reduction by 2030 in non-Emissions Trading System (ETS) greenhouse gas emissions (from 2005 levels).

The greenhouse gas emissions index shown in Figure 15.4 shows that, compared with the trend in total EU-28 emissions, Ireland has not reduced greenhouse gas emissions since 1990. The latest European state of the environment report (EEA, 2019a) noted that Ireland's greenhouse gas emissions in 2017 were the third highest in the EU, at 13.3 tonnes of carbon dioxide equivalent per person, compared with an EU average of 8.8 tonnes of carbon dioxide equivalent per person. Despite an increased renewable energy share over the past 5 years, Ireland (at 10.7%) remains well below the EU average (17.5%) (Figure 15.5).

Figure 15.4 Trend in Ireland's greenhouse gas emissions from 1990 to 2018 compared with the EU-28 average (Source: EEA/Eurostat https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg_13_10&plugin=1)

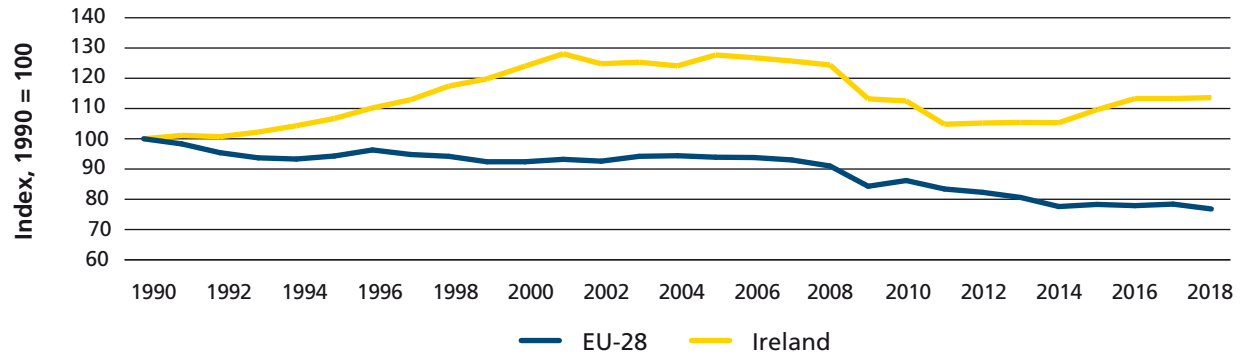
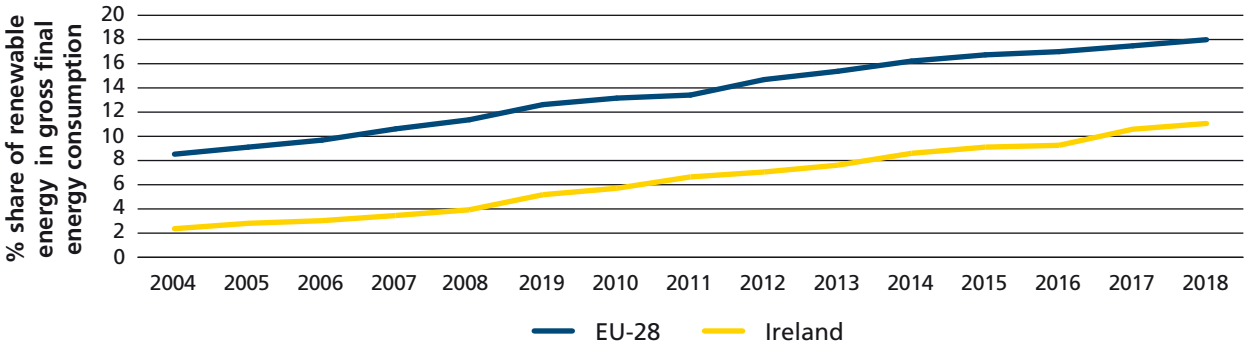


Figure 15.5 Share of renewable energy in Ireland from 2004 to 2018 compared with the EU-28 average (Source: Eurostat https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg_07_40&plugin=1)



The EPA's latest greenhouse gas emissions data for 2019 show that, while some progress has been made in the energy sector in the last several years, emissions in other sectors have been generally increasing or not decreasing fast enough to achieve Ireland's long-term decarbonisation goals. Agriculture continues to be the largest source of emissions, representing 35 per cent of total national emissions in 2019, and emissions are projected to continue increasing towards 2030 absent the implementation of measures outlined in the 2019 Climate Action Plan. The transport and energy industries sectors represented 20 per cent and 16 per cent, respectively, of total greenhouse gas emissions in 2019. The transport sector has been the fastest growing source of greenhouse gas emissions,

showing a 10 per cent increase between 2013 and 2019. The EU ETS covers greenhouse gas emitters in the industry, power and aviation sectors, while all other non-ETS sectors are covered by the EU Effort Sharing Decision.

In 2019, Ireland exceeded its annual EU emissions budget under the Effort Sharing Decision for the fourth year in a row, by almost 7 million tonnes, and is therefore not on the pathway required to meet its 2020 targets. Ireland's non-ETS emissions are projected to be to be only 2-4 per cent below 2005 levels in 2020, compared with the EU target of 20 per cent (EPA, 2020b). Although the impact of COVID-19 will narrow this gap, it is expected that Ireland will still need to rely on purchasing credits or allowances in order to comply with its 2020 targets. Achieving the 2030 targets will require full implementation of the 2019 Climate Action Plan and the use of flexibilities in relation to land use, land use change and forestry. As outlined in Chapter 2, the pace of emissions reduction will need to accelerate beyond 2030. The Commission did not include any priority actions on climate action in its most recent EIR report, noting that it will first need to assess Ireland's National Energy and Climate Plan 2021-2030.

Ireland's Performance on Air

While most air pollutants were below the EU limit and target values for ambient air quality in 2019, there was an exceedance of the nitrogen dioxide annual limit value at a Dublin monitoring location. The World Health Organization's (WHO) guideline values for air quality at 33 EPA monitoring stations were also exceeded, mostly because of the levels of fine particles in the air. Ireland's emissions of ammonia and nitrogen oxides breached agreed limits.

The EU has developed a comprehensive body of air quality legislation, which establishes health-based standards and objectives for a number of air pollutants, including particulate matter, nitrogen oxides and ammonia. More recent EU clean air policy and legislation require significant improvement of air quality, moving the EU closer to the more stringent guideline values recommended by the WHO.

While air quality in Ireland compares favourably overall with that in other EU Member States, which itself is generally improving, recent improvements in monitoring suggest that localised air quality in Ireland's cities, towns and villages is likely to be poorer than previously reported, particularly during the winter when solid fuels are used for home heating. As outlined in Chapter 3, urban air pollution is attributable mainly to emissions from solid fuel burning (particulate matter) and transport (nitrogen oxides). While most air pollutants were below the EU limit and target values for ambient air quality in 2019 (EPA, 2020c), there was an exceedance of the nitrogen dioxide annual limit value at a Dublin monitoring location. WHO's guideline values for air quality at 33 EPA monitoring stations were also exceeded, mostly because of the levels of fine particles in our air (see Table 15.3). There were also two breaches of the WHO guideline value for ground-level ozone in 2019 and four breaches of the European Environment Agency (EEA) guideline value for polycyclic aromatic hydrocarbons (EPA, 2020c).

Nitrogen oxides emissions are projected to reduce and to be compliant, provided that planned measures, particularly in relation to the Climate Action Plan, are implemented (EPA, 2020d). As discussed in Chapter 13, Ireland's ammonia emissions have been rising steadily since 2011, linked to the expansion of the dairy sector. Ammonia is harmful to human health as a precursor of secondary particulate matter and it also poses a significant threat to water quality and ecosystems. Ireland is currently in breach of its ammonia reduction target and is not projected to meet its 2020 or 2030 targets. Current projections indicate that compliance with the 2030 reduction target for non-methane volatile organic compounds (NMVOCs) will also be a challenge (EPA, 2020d).

Addressing the main sources of air pollution (transport, solid fuel burning and agriculture) will require an integrated cross-sector response from government. In this context, while the government's 2019 Climate Action Plan will result in positive benefits for air quality, the continuing lack of a National Clean Air Strategy is a significant gap. Tackling air pollution in a more coordinated and integrated way will deliver multiple health, climate, environmental and societal benefits (Topic Box 15.2).

Topic Box 15.2 Examples of Smart, Integrated Solutions to Tackle Air Pollution and Deliver Multiple Benefits

- Tackle road transport emissions by increasing investment in public transport and walking and cycling infrastructure rather than relying solely on car owners to switch to electric cars. Re-align the location of the housing supply to ensure more supply closer to centres of employment and public transport infrastructure rather than in suburban car-served locations. As well as improving air quality, reducing greenhouse gas emissions and reducing noise pollution, this would also alleviate traffic congestion and have added benefits for people's health, wellbeing and quality of life, as well as improving the attractiveness of urban centres and public spaces.
- Tackle ammonia emissions from agriculture by transitioning to low-emission technologies (e.g. low-emission slurry spreading techniques) coupled with improved soil fertility and nutrient management, which maximises nutrient uptake and results in a lower risk of run-off of nutrients and pathogens into watercourses.
- Combine regulatory and enforcement efforts to reduce 'smoky' emissions from solid fuel heating with a greatly expanded systematic and target-based programme of retrofitting homes with insulation and heat pumps, resulting in warmer, more comfortable homes and associated health benefits.

It is clear that, despite significant progress in recent decades, more needs to be done to further protect human health and the environment from air pollution and to fulfil Ireland's EU and international obligations on air quality. The priority actions for Ireland on air quality, identified by the Commission in its 2019 EIR, are shown in Topic Box 15.3.

Topic Box 15.3 Priority Actions for Ireland on Air Quality as Identified by the European Commission (EC, 2019b)

- Take action, in the context of the forthcoming NAPCP, to reduce emissions from the main emission sources.
- Accelerate the reduction of nitrogen oxide emissions. This will require, for example, a further reduction in transport emissions, particularly in urban areas (and may require proportionate and targeted urban vehicle access restrictions), and/or fiscal incentives.
- Reduce ammonia emissions to comply with currently applicable national emission ceilings, for example by introducing or expanding the use of low-emission slurry spreading techniques.
- Reduce emissions of volatile organic compounds.

The NAPCP is the main governance measure by which EU Member States must ensure that the reduction commitments for 2020 and 2030 are met. The first NAPCPs were due by 1 April 2019. Ireland submitted a draft NAPCP to the Commission in April 2019. As the latest projections show that Ireland is facing challenges in meeting reduction targets (as outlined above), an NAPCP with updated emission reduction policies is currently being finalised.

The Irish Government's 2019 Climate Action Plan will have positive benefits for air quality, particularly in relation to the promotion of electric vehicles and upgrades to housing, including insulation and modes of home heating. The government in late 2019 commenced public consultation on *Ag-Climatise – A Draft National Climate & Air Roadmap for the Agriculture Sector to 2030 and Beyond*, to develop a roadmap for how Ireland's agri-food sector can meet the necessary emissions reduction targets for both air pollutants and greenhouse gases. It sets out a series of 13 proposed actions to be implemented between 2021 and 2030 to deliver emissions reductions, as well as further actions to build partnerships and prepare for the future. Encouragingly, the consultation document recognises the synergies with other environmental priorities and the multiple benefits that can be delivered for air quality, climate, water quality and biodiversity arising from actions such as improvements in nutrient management. The final Ag-Climatise is expected to be published shortly.

Ireland's Performance on Nature

Significant conservation, knowledge and protected area designation gaps remain to be resolved to safeguard nature, given that 85 per cent of protected habitats have been identified as being in an 'unfavourable' (either bad or inadequate) conservation status.

Ireland's third National Biodiversity Action Plan was adopted in 2017. Protected areas now account for approximately 17 per cent of Ireland's land area but only 2 per cent of marine territories. Under the Convention on Biological Diversity, Ireland adopted a target in 2010 that 10 per cent of all coastal and marine areas would be conserved through protected areas, while the EU Biodiversity Strategy for 2030 has committed to a minimum of 30 per cent protection of the EU's sea areas, with strict protection for a third of these areas. The Commission's EIR for 2019 noted that, following earlier European Court of Justice rulings, on the basis of the latest update, Ireland's terrestrial Natura 2000 network under the Birds and Habitats Directives is now considered to be complete but that further designation of SPAs under the Birds Directive is required, particularly for the corncrake. The EIR further notes that there is also a lack of clarity on the level of implementation of conservation measures for designated sites and that significant knowledge and designation gaps remain in Ireland's marine Natura 2000 network. The Commission's most significant concern is the conservation of raised and blanket bogs and the issue of turf cutting within protected areas, which is still the subject of an infringement procedure (2010/2161). The Commission's report also notes that Ireland has conservation issues in SPAs, for example the decline of wading birds, particularly the curlew, reconciling the protection of the hen harrier with forestry and wind-farm development, and addressing the cutting of hedgerows and the burning of uplands during the nesting season of birds (EC, 2019b).

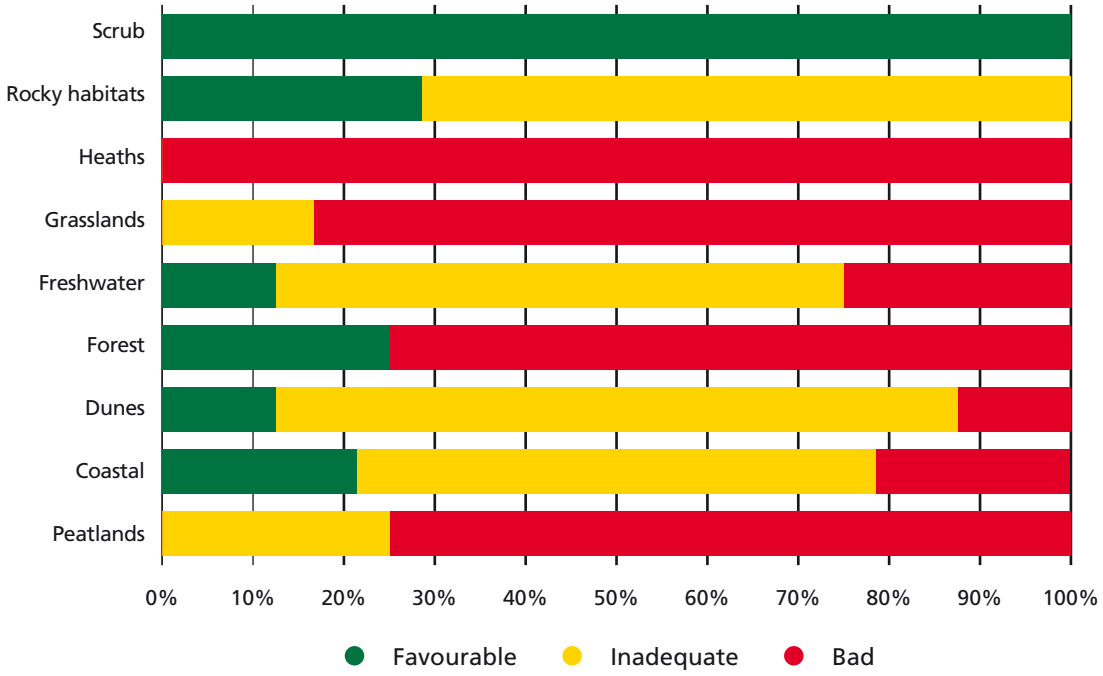
As discussed in Chapter 6, the most recent Habitats Directive Article 17 report (NPWS, 2019) identified 85 per cent of Ireland's listed habitats as having an 'unfavourable' (either bad or inadequate) conservation status, which is a higher proportion than the EU average of 72 per cent (European Court of Auditors, 2020). Almost half of all Ireland's listed habitats (46%) are demonstrating ongoing declines. These ongoing declines are of real concern, particularly in Ireland's peatland, grassland, woodland and marine habitats. None of Ireland's listed peatlands was in a favourable conservation status in 2019 (Figure 15.6). The main drivers of these declines are agricultural practices, which are negatively affecting over 70 per cent of habitats, particularly ecologically unsuitable grazing, abandonment, pollution, drainage and reclamation practices.

The picture was somewhat better for protected species, with 57 per cent of listed species reported as being in a 'favourable' conservation status and 72 per cent demonstrating stable or improving trends (NPWS, 2019). Ireland is a European stronghold for many of the listed EU species such as the otter. The proportion of EU protected species demonstrating ongoing decline is 15 per cent. In relation to birds, almost 20 per cent of Ireland's breeding bird species are in long-term decline, while the populations of over half of Ireland's wintering birds are declining over the short term[2]. Habitat loss, climate change and cumulative impacts represent the biggest pressures.

Given the broadly negative status of semi-natural habitats, the status of unprotected species is unlikely to be positive. To date, 9.9 per cent of Ireland's approximately 31,500 species have had their conservation status systematically assessed according to the International Union Conservation of Nature Red List Process. Of the 3110 species assessed, 2.7 per cent are now regionally extinct, 14.8 per cent fall into a threat category (critically endangered, endangered or vulnerable) and a further 9.2 per cent are considered 'near threatened'. Of the 15 resident butterfly species systematically monitored in Ireland by the Irish Butterfly Monitoring Scheme coordinated by the National Biodiversity Data Centre, five have experienced strong or moderate population declines between 2008 and 2019 (Judge and Lysaght, 2020; NBDC, 2019).

2 *Article 12 reported data https://nature-art12.eionet.europa.eu/article12/report?period=3&country=IE*

Figure 15.6 Conservation status of listed habitats, 2019 (based on 59 individual habitat assessments) (Source: NPWS, 2019)



Overall, the outlook for biodiversity both at a European level and in Ireland is stark. Recent reports show that the loss of species and habitats is increasing at a much faster rate than previously thought. For example, populations of farmland birds and grassland butterflies in Europe have declined by more than 30 per cent since 1990. The European state of the environment report (EEA, 2019a) acknowledged that the overall objective of the EU Biodiversity Strategy to halt the loss of biodiversity and ecosystem services by 2020 will not be met. A recent audit by the European Court of Auditors examined the contribution of the Common Agricultural Policy (CAP) to maintaining and enhancing biodiversity. It found that the formulation of the agriculture targets in the EU Biodiversity Strategy makes it difficult to measure progress; the way the Commission tracks biodiversity expenditure in the EU budget is unreliable; the impact of CAP direct payments is limited or unknown; and the Commission and Member States have favoured lower impact rural development measures. It recommended that the Commission improves the design of its next biodiversity strategy, enhances the contribution made to biodiversity by direct payments and rural development action, tracks biodiversity-related expenditure more accurately and develops reliable indicators that are suited to monitoring progress in farmland biodiversity (European Court of Auditors, 2020).

The priority actions for Ireland to improve nature protection, as identified by the Commission in its 2019 EIR, are shown in Topic Box 15.4.

Topic Box 15.4 Priority Actions for Ireland on Nature and Biodiversity as Identified by the European Commission (EC, 2019b)

- Complete the Natura 2000 designation process for both terrestrial and marine environments. Put in place clearly defined conservation objectives and the necessary conservation measures so that they may meet their objective of maintaining or restoring species and habitats of community interest to a favourable conservation status across their natural range.
- Take action to ensure that burning in uplands (especially in Natura 2000 areas) and hedgerow cutting are fully compatible with the requirements of the Birds and Habitats Directives.
- Increase efforts to manage blanket bogs.
- Take practical steps to address the serious decline of waders, and further develop the conservation programme for the curlew, both in Natura 2000 sites and in the wider countryside.
- Ireland is urged to notify its provisions on penalties, as required by Article 30(4) of the Invasive Alien Species Regulation, as soon as its national legislation is adopted.

Ireland's Performance on Water

Ireland is not on track to meet its Water Framework Directive objectives for 2021, and achieving full compliance by 2027 will be a major challenge.

European Union water legislation puts in place an extensive protective framework to ensure high standards for all water bodies in the EU and addresses specific pollution sources (e.g. from agriculture, urban areas and industrial activities). Water policy and management in Ireland is directed by the Water Framework Directive, which sets an objective of achieving at least 'good status' for all its waters by 2015 (or, with extensions, by 2021 or 2027). Ireland adopted its second RBMP in 2018, which sets out the measures to be taken up to 2021 to achieve compliance with Water Framework Directive objectives. Preparation of Ireland's third RBMP for 2022-2027 is currently underway.

Despite a lot of good work being undertaken over the past 20-30 years, Ireland is falling short in achieving the Water Framework Directive 'good status' objective. While good progress has been made in tackling the most seriously polluted water bodies in Ireland, overall water quality trends in Ireland's rivers, lakes and estuaries are a significant cause for concern, as discussed in Chapter 7 and summarised in Table 15.3. Ireland is not on track to meet the Water Framework Directive objectives for 2021, and achieving full compliance by 2027 will be a significant challenge. Nearly half of Ireland's surface waters are failing to meet their water quality objectives, and high status river sites are in serious decline. The EPA's recent water quality report 2013-2018 (EPA, 2019) recorded a net decline in 128 river water bodies, or 5.5 per cent, since the previous assessment cycle of 2010-2015. After nearly 15 years of a declining trend in riverine nutrient inputs to marine areas, the trend has started to reverse and nutrient inputs have gradually increased since 2013/2014, linked with losses from agriculture and discharges from wastewater treatment plants.

As discussed in Chapter 7, agriculture is the main pressure on water quality in Ireland, followed by hydromorphology and wastewater. Agriculture is a significant pressure for over 50 per cent of waters at risk of not meeting their target of 'good status' by 2027, and tackling diffuse agricultural pollution is challenging. The Agricultural Sustainability Support and Advisory Programme was established as part of a more collaborative approach to implementing the second RBMP between 2018 and 2021. The programme provides a free and confidential advisory service to farmers and works alongside the Local Authority Waters Programme to facilitate targeted actions to improve water quality.

The Urban Waste Water Treatment Directive sets standards for treating urban wastewater at large urban areas to protect the environment and people's health. The final deadline for Ireland to comply with this directive was 2005. Despite this obligation, the latest EPA report (EPA, 2020e) found that less than half (44%) of the total wastewater load from Ireland's large urban areas was treated to the required standards in 2019. The main factor in Ireland's poor compliance is the failure at Ringsend in Dublin, which treats over 40 per cent of the country's urban wastewater. Raw sewage continues to be discharged from 35 towns and villages without treatment. Five large towns and cities discharging into sensitive areas, including Cork, did not have the more stringent level of treatment required to remove phosphorus and/or nitrogen. Improvements are needed at 113 priority urban areas to eliminate raw sewage, prevent water pollution, protect freshwater pearl mussels and bathing waters and meet EU standards. The need for Ireland to improve wastewater treatment infrastructure and put an end to direct discharges of raw sewage was highlighted by the Commission in its EIR (Topic Box 15.5).

While 95 per cent of Ireland's bathing waters met the minimum standard of 'sufficient' in 2019 and 89 per cent were 'excellent' or 'good' (EPA, 2020f), the proportion of Irish coastal bathing waters at 'excellent' quality (73% in 2019) is below the EU average (85% in 2019) (EEA, 2019b). Urban wastewater is the greatest pressure affecting bathing water, again emphasising the need for urgent and prioritised improvements in the collection and treatment of urban wastewater.

Topic Box 15.5 Priority actions for Ireland on Water Quality and Management as Identified by the European Commission (EC, 2019b)

- Ensure timely adoption and reporting of RBMPs as well as Flood Risk Management Plans.
- Ensure compliance with the Urban Waste Water Treatment Directive by ending direct discharges of untreated wastewater. Ensure that wastewater is collected and appropriately treated throughout the country. Complete water infrastructure projects for agglomerations that are in breach of the directive as soon as possible.

Ireland's Performance on Waste and the Circular Economy

The Commission's 2019 EIR noted Ireland's lack of a national strategy for the circular economy, which it identified as a priority action for Ireland.

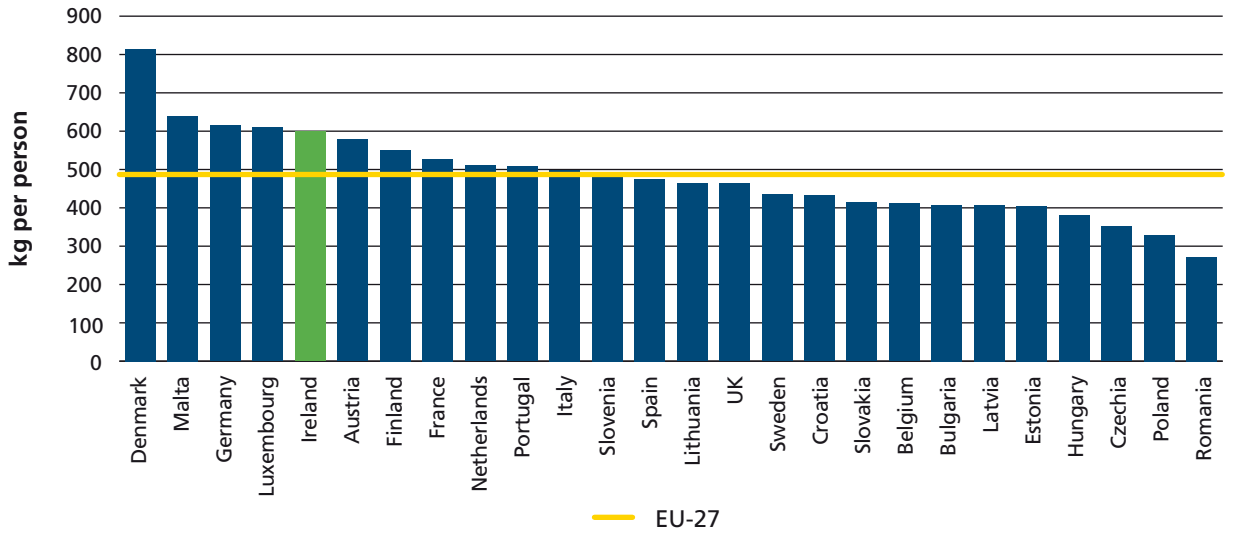
European waste policy has long been centred on the waste hierarchy.[3] The EU Circular Economy Action Plan, adopted in 2015, emphasises the need to move towards a life-cycle-driven 'circular' economy, reusing resources as much as possible and bringing residual waste close to zero. It complements and updates pre-existing European waste management legislation setting down binding targets for waste recycling. The Department of the Environment, Climate and Communications (DECC) published *A Waste Action Plan for a Circular Economy: Ireland's National Waste Policy 2020-2025* in September 2020, which aims to ensure that Ireland not only meets legal targets but also takes full advantage of the opportunities of the new economy.

Over 2.9 million tonnes of municipal waste was generated in Ireland in 2018, equating to 600 kg per person, up 4 per cent from 577 kg per person in 2017. This is well above the EU average of 492 kg per person (Figure 15.7) (EPA, 2020g). The large variation in municipal waste generation across EU Member States reflects differences in consumption patterns and economic wealth, as well as ongoing differences in how countries manage and report municipal waste, despite efforts by Eurostat to improve harmonisation in waste reporting.

As outlined in Chapter 9, the steady progress Ireland has made in meeting EU recycling targets has slowed in recent years. Ireland's overall recycling rate for municipal waste of 38 per cent in 2018 (EPA, 2020g) was well below the European average of 47 per cent and significantly behind the leading EU country, Germany, where 67 per cent of municipal waste was recycled in 2018.[4] While Ireland should be very close to meeting its recycling target for 2020, achieving compliance with future more stringent targets will present a significant challenge.

There was a significant reduction in the landfill rate between 2012 and 2018, from 41 per cent to 15 per cent, driven by an increase in the landfill levy and increased incineration capacity nationally. Waste incineration with energy recovery increased substantially in the same period, from 17 per cent to 43 per cent (EPA, 2020g). These trends indicate that waste movements away from landfill in Ireland have gone largely to incineration rather than recycling. The Commission cautioned in its EIR that the increased use of incineration must not prevent Ireland from meeting post-2020 recycling targets. The EIR also recommended that Ireland could achieve further progress by introducing tax incentives for households to encourage waste prevention and recycling (Topic Box 15.6), while noting that Ireland has made an effort to increase public awareness and participation via several awareness and education measures, including on food waste and separate collections.

Figure 15.7 Municipal waste generated in EU Member States in 2018 (Source: EPA, 2020g)



3 *Reducing waste generation, increasing material reuse and recycling, diverting waste from landfill and limiting energy recovery to non-recyclable materials.*

4 *Eurostat indicator 'Recycling rate of municipal waste' (online data code: SDG_11_60) available online at: https://ec.europa.eu/eurostat/databrowser/view/sdg_11_60/default/table?lang=en (accessed 19 October 2020).*

Topic Box 15.6 Priority Actions for Ireland on Waste and the Circular Economy as Identified by the European Commission (EC, 2019b)

- Develop a more coherent circular economy policy framework.
- Introduce new policy instruments, including economic instruments, to promote prevention and make reuse and recycling more economically attractive.
- Shift reusable and recyclable waste away from incineration and landfilling.
- Increase recycling rates by making the separate collection obligation more effective. Carry out a review of recent reforms to the waste collection market.
- Provide more timely waste generation and management data.

The rate of circular (secondary) use of material in Ireland has remained consistently low, at less than 2 per cent, which is well below the EU average (11% in 2017).[5]

Ireland's eco-innovation performance has continued to improve. Ireland ranked 11th in the EU Eco-innovation Index in 2017 (latest data available), very close to the EU average. The EIR recognised that Ireland is very strong in research and development, attracting many researchers and large amounts of early-stage green investment. The EPA and Enterprise Ireland have developed several support measures to help businesses adopt resource-efficient and circular economy practices.

4. The European and Global Policy Context

With the 'European Green Deal' and the Global Context, the European Environmental Policy Sphere is Rapidly Changing

Large-scale policy, demographic, economic and geopolitical developments are at play, including post-pandemic green recovery proposals, which will have significant consequences for the environment and associated responses.

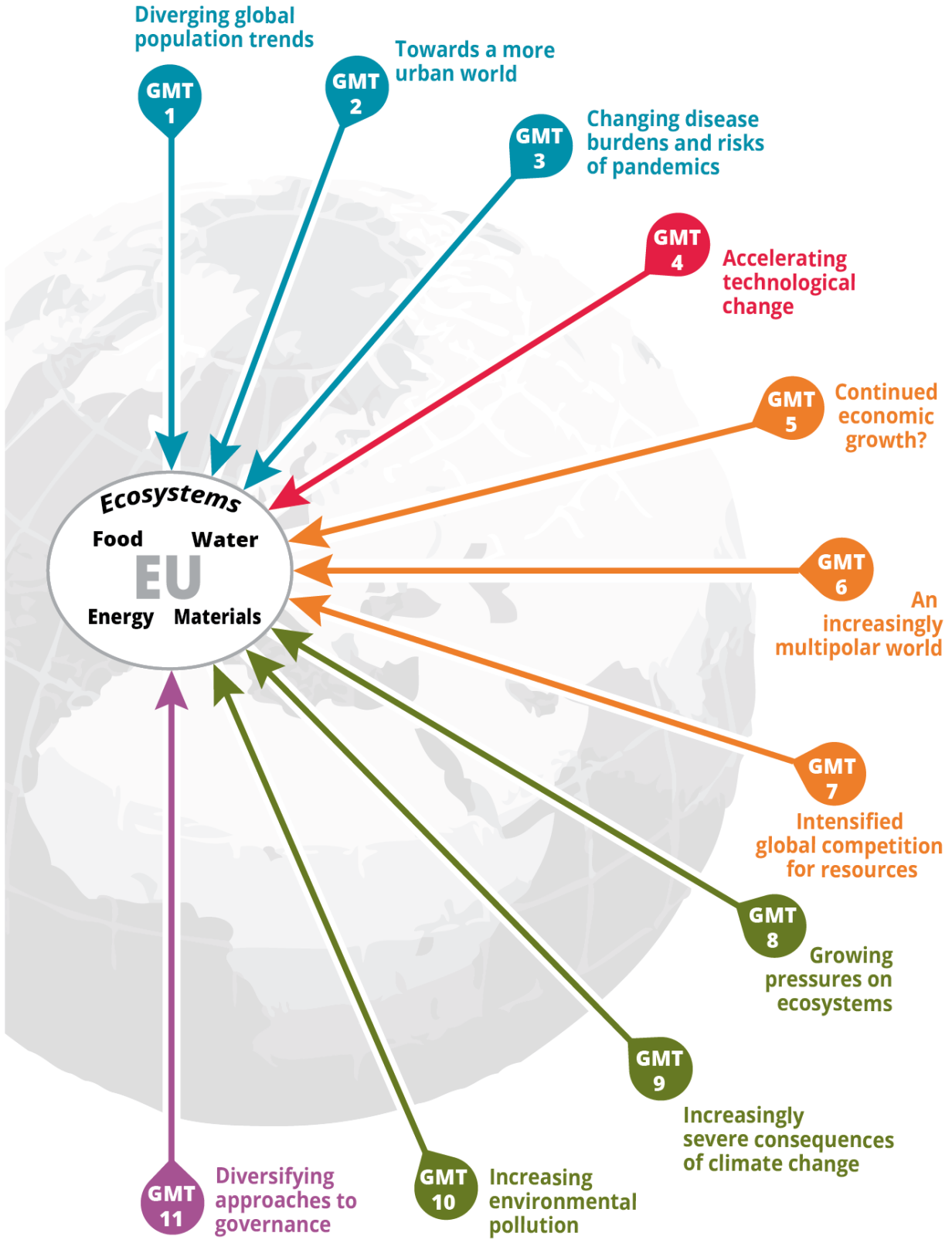
The European Green Deal, published in 2019, is a wide-ranging policy response to a range of key environmental challenges (EC, 2019a). This policy document is expected to shape environmental policy across the EU and in Ireland for the next decade. The Green Deal provides in one overarching action plan a high-level response to challenges ranging from climate to efficient use of resources, the circular economy, restoring biodiversity and cutting pollution. It includes linked policy responses that cover the Circular Economy Action Plan, a Farm to Fork Strategy and an EU Biodiversity Strategy for 2030. The deal covers investment and finance aspects.

In today's globalised world, for example, developments elsewhere can influence the availability and price of natural resources and energy in Europe, and increasing environmental pollution in other parts of the world contributes to direct environmental and human harm in Europe, and vice versa.

In recent years the policy focus in Europe, and in turn Ireland, has increasingly moved towards strategies with a long-term societal transition perspective, with 2050 goals being set for climate, biodiversity and the circular economy, etc. Adopting this long-term transition perspective requires consideration of how Europe's environment and societies might be affected by large-scale, long-term global megatrends. The EEA has identified and assessed 11 global megatrends considered important for Europe's environment in the long term (Figure 15.8), with the aim of providing an improved basis for strategic European environmental policymaking.

5 *Eurostat indicator ' Circular material use rate' (online data code: SDG_12_41) available online at: https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg_12_41&plugin=1 (accessed 19 October 2020).*

Figure 15.8 The 11 global megatrends identified by the EEA (2015)



The ongoing revolution in data and knowledge, sometimes referred to as the 'fourth industrial revolution', is another key driver at European level. Emerging data sources, such as Earth observation and Earth systems models, can now be combined with socioeconomic data and contextual analysis to enable better informed policy decisions towards achieving the Sustainable Development Goals (SDGs) and environmental agreements (EEA, 2019a). 'Big data' generated through artificial intelligence and technological analytics can be used to generate new environmental knowledge to inform environmental assessment processes and advance better decision-making. Future sensor technology should allow disaggregation of spatial and demographic information at a detailed level. A combination of satellites and airborne and ground-based networks can be used to monitor developments (e.g. land use change, deforestation, drainage) and associated impacts at the local, regional and global levels in near real time, enabling rapid responses to changing circumstances. In addition, citizen science can enable the timely, cost-effective collation of *in situ* data from dispersed sources. All these new data collection, mapping and assessment advances will generate new insights and knowledge about the state of the environment, which in turn will inform policy responses to deal with the issues identified.

Ireland and the United Nations Sustainable Development Goals

Ireland has committed to the UN's 2030 Agenda for Sustainable Development and to fully achieving the SDGs by 2030.

The UN's 2030 Agenda for Sustainable Development and its SDGs are becoming a major influence and driver in environmental policy.[6] For example, the Commission's Green Deal (EC, 2019a) is an integral part of its strategy to implement the UN's 2030 Agenda and the SDGs. This puts the 'sustainable development goals at the heart of the EU's policymaking and action'. The importance of the SDGs for environment policy is also highlighted in the recent state of the environment report from the EEA (2019a).

In Ireland, the *Sustainable Development Goals National Implementation Plan 2018-2020*, published by the DCCAE in 2018, provides for a whole-of-government approach to implementing the UN SDGs (DCCAE, 2018). The plan provides an 'SDG Matrix' that identifies the government departments responsible for each of the 169 SDG targets. According to the DCCAE, the plan identifies four strategic priorities to guide implementation: awareness, participation, support and policy alignment.

Another important national SDG policy document is Ireland's Voluntary National Review report. This is Ireland's report to the UN High-level Political Forum (Government of Ireland, 2018). The report looks at Ireland's performance against each of the 17 SDGs, mainly using a range of Eurostat indicators developed for the SDGs. In Ireland, the task of gathering statistics on all of the SDG goals, targets and indicators, including the environmental indicators, has been given to the Central Statistics Office (CSO).[7] The CSO, in collaboration with Ordnance Survey Ireland (OSI), has developed the Geohive public platform 'for exploring, downloading and combining publicly available data relating to the UN and the European Union (EU) Sustainable Development Goals'.[8] The Geohive also provides spatial data and includes 'story maps and videos that provide a narrative to the SDGs and enable non-technical users to visualise the data'.

5. Improving Environmental Performance and Policy Implementation

Coherent Governance Structures are Key to Effective Implementation of Environmental Legislation and Policy

With the ever-expanding range and complexity of environmental policy and legislation, plans and programmes in place across different departments and regulatory bodies – which increasingly require cross-sectoral action – a review of national environmental governance in Ireland is timely. This review could consider the governance structures that would allow better coordination and integration of environmental protection work, and that would support the full implementation and enforcement of environmental legislation and policies. It could examine how to be more effective at providing information on the substantial range of work that is already carried out on the protection of Ireland's environment.

In its 2019 EIR of Ireland, the Commission identified specific priority actions for Ireland to strengthen environmental governance, which are outlined in Topic Box 15.7.

6 https://sustainabledevelopment.un.org/post2015/transformingourworld

7 https://www.cso.ie/en/unsdgs/

8 https://irelandsdg.geohive.ie/

Topic Box 15.7 Priority Actions for Ireland to Strengthen Environmental Governance as Identified by the European Commission (EC, 2019b)

- Better inform the public about compliance promotion, monitoring and enforcement. At a minimum, this should involve publishing information on the outcomes of administrative enforcement action and of the follow-up to detected cross-compliance breaches on nitrates and nature.
- Provide more information on the practical aspects of cooperation and coordination between inspectors, police, prosecutors and others to combat environmental crime.
- Improve the publication of information on environmental damage.
- Ireland can further improve its overall environmental governance (such as transparency, citizen engagement, compliance and enforcement, as well as administrative capacity and coordination).
- Increase efforts to be a party to relevant multilateral agreements, by signing and ratifying multilateral agreements that are not yet signed or ratified.

The Organisation for Economic Co-operation and Development (OECD)'s recent review of the EPA highlighted that the fragmented nature of Ireland's environmental legislation is reflected in the way environmental protection responsibilities are dispersed across numerous public bodies and two government departments, with limited formal coordination structures (OECD, 2020).

Suggested Enablers for Improving the Implementation and Integration of Environmental Policy in Ireland

The remainder of this section discusses suggested enablers to help with continued improvement in the implementation and integration of environmental policy in Ireland. These suggestions have been informed by the findings of the Commission EIR (EC, 2019b) and key European and international reports (EEA, 2019a; UN, 2019). The insights gained from the EPA's involvement in reviewing plans and programmes as part of the Strategic Environmental Assessment (SEA) process and in regulation, monitoring and research across a range of environmental policy areas have also informed these suggestions.

Policy effectiveness hinges on good policy design; the common elements of good policy design, as identified by the UN, are outlined in Topic Box 15.8.

Topic Box 15.8 Common Elements of Good Policy Design (UN, 2019)

1. Setting a long-term vision through inclusive, participatory design processes.
2. Establishing a baseline of environmental conditions, quantified science-based targets and milestones.
3. Effectively integrating environmental, social and economic concerns.
4. Conducting *ex ante* and *ex post* cost-benefit or cost-effectiveness analyses to ensure that public and private funds are being used with optimal efficiency and effectiveness and that social aspects are being considered in sufficient detail.
5. Building in monitoring regimes during implementation that support adaptive policies, ideally involving affected stakeholders.
6. Conducting post-intervention evaluation of policy outcomes and impacts to close the loop for future policy design improvement.

The OECD's Indicators of Regulatory Policy and Governance (iREG) (OECD, 2018) show that, despite recent progress, Ireland still ranks well below average among OECD countries in the areas of stakeholder engagement in developing regulations and in *ex post* evaluation of regulations (i.e. whether or not the regulations are working and achieve their aims), highlighting the scope for improvements in these areas.

Integration and Policy Coherence

While there is a growing recognition of the need for more joined-up policymaking to tackle the complex and interdependent nature of environmental problems, actual mechanisms for promoting environmental and sectoral policy integration and coherence are not widely applied globally (UN, 2019). There is certainly scope for greater application of statutory assessments such as SEA and Appropriate Assessment, or non-statutory forms of sustainability appraisal, to improve the mainstreaming of environmental considerations into sectoral plans and programmes, such as those listed in Figure 15.2. To be effective, this integration needs to happen both in a vertical direction at different levels of the decision-making process, from national down to local level, and horizontally across sectoral decision-making, including transport, the built environment, energy, agriculture, etc.

Ultimately, however, more coherent policies, legislation and plans are needed both at European and at national level, instead of the 'silo-thinking' that has been characteristic of the past.

The UN 2030 Agenda for Sustainable Development calls on all countries to enhance policy coherence as an essential means of implementation for all the SDGs (SDG Target 17.14). The OECD has published recommendations designed to assist governments' efforts to enhance policy coherence for sustainable development and develop institutional mechanisms to align and coordinate actions among levels of government. Recommendations include encouraging formal governance arrangements and informal working methods that support effective communication between ministries and departments, and between ministries and other public sector bodies under their aegis; the use of high-level coordinating mechanisms; building capacity in public administrations and aligning training strategies and programmes with the principles and integrated nature of the SDGs; and engaging proactively with stakeholders in different phases of the policy cycle (OECD, 2019).

As part of efforts to improve policy coherence and resolve policy inconsistences and conflicts, environmentally harmful policies and incentives also need to be identified and resolved, including aspects relating to Ireland's system of subsidies and taxes (e.g. subsidies on fossil fuels that hinder emissions reduction efforts and in fact promote pollution). The Commission has repeatedly stressed that there is potential for Ireland to improve how its tax system can support environmental objectives (EC, 2019b).

Developing Links between Land Use, Spatial Planning and Environmental Protection

There have been important recent developments in Ireland's spatial planning arena, including a new National Planning Framework with a long-term outlook to 2040, the establishment of Regional Assemblies to implement spatial planning decisions at a regional level, and the development of integrated metropolitan planning and transport policies. Another significant development has been the establishment of the Office of the Planning Regulator, an independent body, to provide oversight of regional and local-level plan-making and ensure that this is consistent with national and regional policies, which has climate action as a key part of its assessment criteria. The development of Ireland's first National Marine Planning Framework, currently under development, is another important milestone towards making informed and coordinated decisions about how to use marine resources sustainably.

Several chapters in this report have highlighted the need for more integration around land use management to serve as a means of coordinating how people, nature, food production, energy production and other economic activities can coexist and be supported to be developed in a sustainable manner. A new, more coordinated approach to land use management and all that this includes could be developed to steer Ireland's response to climate change, biodiversity loss and other environmental challenges in an integrated way in the years and decades ahead. Land mapping (land cover and land use) and environmental sensitivity mapping are the processes and tools needed to gather information for effective land management. In Ireland, the EPA and OSI are undertaking a dedicated national land cover programme. This aims to supplement previous maps such as CORINE (Coordination of Information on the Environment) with a national land cover map that is much more detailed in spatial resolution and classification structure. This work is covered in more detail in Chapter 5.

The application of an SEA can also be effective in ensuring that environmental and climate considerations are integrated into the development of public plans and programmes. An Environmental Sensitivity Mapping Webtool has been developed with EPA funding to support the SEA processes in Ireland.[9] The webtool can highlight the relative environmental sensitivity of different areas and can be used 'to provide early warning, inform on the potential for land use conflicts and, in this way, provide a critical evidence basis for sectoral planning discussions and for developing alternatives that avoid or minimise potentially incompatible or unsustainable zonings' (González Del Campo *et al.*, 2019).

9 https://www.enviromap.ie/

The People Dimension and Community Engagement

To succeed, the development and implementation of environmental plans and programmes requires engagement and buy-in from businesses, farming, local communities and individuals. Communities, citizens and businesses need to be supported and empowered to protect and improve their environment. Both the climate action and the sustainable development agendas recognise the need for social considerations to be better factored into environmental and sectoral policymaking, to ensure a just transition and deliver on the broader range of the SDGs. This is reflected in the Commission's Green Deal, which focuses on enabling European citizens and businesses to benefit from the shift to a sustainable future in a way that is just and socially fair.

Implementation Requires Investment

Ultimately, improving the implementation of environmental policies, plans and programmes will require much greater levels of investment. This includes increased public funding for critical services such as water and wastewater treatment infrastructure and public transport. More widely, sustainable finance options will be needed to fund solutions and investment in green technologies, as well as funding for nature and community projects, monitoring, regulation and oversight. Securing this scaled-up investment hinges on political will, underpinned by public support.

Measuring Performance is Central to Driving Implementation

To improve implementation, developments are needed in how the performance of environmental and sectoral plans, policies and strategies are tracked and measured. It is difficult to gauge progress without tangible targets. Implementation improves when plans/programmes contain objectives, measures and actions that are measurable, verifiable and reportable. Monitoring of the environmental performance of plans/programmes could be improved with the development of a standardised set of objectives, targets and indicators for different environmental media, at difference scales. Opportunities for the sharing of resources and data would lessen the financial burden of monitoring. Performance data should be publicly available, for example by the publication of annual indicator reports

Learning from Good Practice

Ireland already has many examples of delivering positive results for environmental protection where there are clear policies, commitments and resources, including the regulation of industry and LIFE nature conservation projects. The Water Framework Directive governance structures provide a positive example of collaboration across multiple public authorities, while on the enforcement side, the NIECE network for compliance and enforcement is an internationally recognised example of good practice. Improvements in Building Energy Ratings were driven by changes in the building regulations. In terms of public engagement, recent positive developments include the National Water Forum, the local authority Community Water Officers, the Citizen's Assembly and the National Dialogue on Climate Action.

There are also some promising signs that improved policy coherence is starting to emerge. For example, the NECPs are intended to improve consistency between energy and climate policies and could therefore become a good practice example of how to link sector-specific policies with other interlinked themes such as agriculture-nature-water and transport-air-noise-health, with a view to fostering synergies and delivering co-benefits. Similarly, the Ag-Climatise roadmap currently being developed by the Department of Agriculture, Food and the Marine seeks to link agriculture-climate-air-ecosystems. At the EU level, improved levels of environmental and cross-sectoral policy coherence are evident in the revised Bioeconomy Strategy, Circular Economy Package and the Green Deal.

Building on these collective findings, some suggested enablers for improving Ireland's implementation, integration and monitoring of environmental legislation, policy, plans and programmes are presented in Table 15.2.

Table 15.2 Suggested enablers for improving the implementation and integration of environmental policy, plans and programmes in Ireland

ENABLERS FOR IMPROVING IMPLEMENTATION

Governance
Strong implementation structures and governance arrangements are needed to ensure that legislation and policy is implemented and plans and programmes are delivered at the appropriate levels. There is a need for coordinated and integrated approaches as the delivery of many of the targets will require cross-sectoral action

Measurable targets
Implementation improves when plans/programmes contain objectives and measures that are measurable, verifiable and reportable

Enforcement
Greater oversight and enforcement is needed to address a lack of implementation and poor compliance in a number of key environmental policy areas such as those as identified in EPA enforcement reports

Investment
Far greater investment is needed to fully implement all of Ireland's environmental legislation, policies, plans and programmes, including increased public funding for critical services, nature and community projects, monitoring, regulation and oversight and sustainable finance options to fund solutions in green technologies

ENABLERS FOR IMPROVING INTEGRATION

Overall vision
A long-term vision is needed for Ireland's environment and a coherent overarching and ambitious plan for archieving this

Collaboration
With many of the key environmental challenges requiring coordinated cross-sectoral action, greater collaboration is needed across government departments and public authorities

Development planning
The National Planning Framework and reformed governance structures should facilitate more coordinated long-term development planning. The new Office of the Planning Regulator will undertake independent reviews of all local authority statutory development plans to ensure consistency with relevant regional and national policies, including on climate action

Integrated land mapping
An integrated approach to land mapping at national and regional level would enable Ireland to plan, coordinate and deliver the various datasets and interventions needed for sustainable land use management and to tackle key environmental challenges

New data and evidence
High-quality, accessible and up-to-date environmental information is needed to inform better, more integrated plan-making action at different levels. This includes new decision support tools, mapping capabilities, etc.

Closing gaps
There are gaps in Ireland's environmental policy that need to be addressed. Notable examples include the National Clean Air Strategy, which is yet to be published, and the continuing lack of a national landscape characterisation map

Role of SEA
Promote and strengthen the role of SEA and improve the effectiveness of these assessments in influencing planning policy decisions at national, regional and local levels

ENABLERS FOR IMPROVING MONITORING AND PUBLIC PARTICIPATION

Monitoring and reporting
Ongoing monitoring of implementation progress is essential, so that the performance of plans, policies and strategies can be tracked and measured. Performance data should be publicly available, for example by publishing annual indicators, to provide accountability and transparency around how well environmental commitments are being met

Tracking
Environmental policies, plans and programmes cut across and intersect a wide range of sectoral policies, plans and programmes across various departments and public authorities. A centralised government database (for example on the gov.ie website) would facilitate better tracking of plans and programmes and improve public information, as well as help identify synergies and gaps

Public participation
To succeed, the development and implementation of both sectoral and environmental plans and programmes requires engagement and buy-in from businesses, farming, local communities and individuals. Communities, citizens and businesses need to be supported and empowered to protect and improve the environment and to demand that development takes place in an environmentally sustainable way

Access to justice
Further improve information about citizens' rights to accessing justice in environmental matters and enable them to bring environmental challenges without facing prohibitive costs

6. Conclusions

Summary Assessment of Ireland's Implementation Performance

This section presents a summary of the EPA's assessment of Ireland's performance in implementing key environmental policy and legislation in the areas of climate, air, nature, water and waste/circular economy, based on the high-level performance assessments presented earlier in this chapter and the findings presented elsewhere in this report. Selected relevant indicators for each of these policy areas are presented in Table 15.3, illustrating the current status/level of compliance, the dominant trend over the past 20-25 years, and the outlook/prospective of Ireland meeting the relevant policy objectives/targets.

Table 15.3 Current assessment and outlook for Ireland across five key environmental policy areas (Source: EPA, based on evidence and assessments presented in this report)

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
CLIMATE	**Climate**			
	Greenhouse gas (GHG) emissions			Greenhouse gas (GHG) emissions have not been sufficiently decoupled from economic activity. Ireland had the third highest per capita GHG emissions in the EU in 2017 (EEA, 2019a), resulting in a current assessment of very poor. Our 2020 target will not be met without relying on purchasing credits or allowances (EPA, 2020b). Decarbonisation of energy will need to be accelerated rapidly to achieve our 2030 target and enable achievement of the current or emerging 2050 transition objective. Steps to reduce other GHG emissions are urgently needed.
	Renewable energy share			Despite considerable expansion in recent years, Ireland's renewable energy share (at 10.7%) remains well below the EU average (17.5%), with fossil energy making up 90% of Ireland's energy needs. Ireland looks set to fall short of reaching binding EU renewable energy targets for 2020. National targets for 2030 imply significant further expansion in this period which will then need to continue.
	Climate adaptation			There have been good advances on the planning and governance side, with the establishment of the Climate Action Regional Offices, and all sectors and Local Authorities now have climate adaptation strategies and plans in place. However, there is little evidence of the implementation of these strategies or plans to date.
	Overall climate assessment			While there has been some progress on renewable energy and ambitious climate action and adaptation plans, Ireland's failure to significantly reduce GHG emissions results in a 'very poor' current assessment. Meeting 2030 targets and our 2050 transition objective will require the full implementation of current policies and measures and significant national investments.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
AIR	**Air quality**			
	Particulate matter ($PM_{2.5}$ and/or PM_{10})			Compliant in 2019 with EU limits but a number of exceedances of WHO guideline values in urban areas (EPA, 2020c). Increased monitoring is highlighting high levels in many Irish cities, towns and villages. Particulate matter from the burning of solid fuel is estimated to cause 1300 premature deaths per year. Low-smoke zones and climate action measures will have benefits for air quality and health.
	Nitrogen oxides (nitrogen oxide and nitrogen dioxide)			Concentrations are moderate but increasing due to growth in traffic numbers. EU air quality limit values for nitrogen dioxide were exceeded during 2019 at one site in Dublin (EPA, 2020c); indications are that there will be exceedences at further monitoring stations in the future. Climate action measures will have co-benefits for air quality and health.
	Ozone (ground level)			Compliant in 2019 with EU limits but some exceedances of WHO guideline values in the past and exceedances at two sites in 2019 (EPA, 2020c). Measures to reduce nitrogen oxides will impact the potential for formation of ozone in sunny weather conditions. There is a risk from impact of transboundary ozone (from outside Ireland).
	Polycyclic aromatic hydrocarbons (PAH)			Polycyclic aromatic hydrocarbons (PAH) are emitted residentially from the combustion of solid fuels, such as peat, wood and coal. PAH are known carcinogens. Compliant in 2019 with EU limits but exceedances of EEA reference values at four sites indicate that PAH in ambient air are due to the burning of solid fuels is a large problem in Ireland's cities and towns (EPA, 2020c). Low-smoke zones and climate action measures will have benefits for air quality and health.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
AIR	**Emissions to air**			
	Nitrogen oxides			Ireland's national emissions limit for nitrogen oxides has been exceeded since 2010, although emissions decreased slightly in 2018. Lower EU limits will come into effect in 2030. Based on the latest EPA projections (EPA, 2020d) nitrogen oxide emissions are projected to reduce and to be compliant, provided planned measures, particularly in relation to the Climate Action Plan, are implemented; however, further measures may be required to ensure compliance in 2030.
	Sulphur dioxide			Emissions have decreased by 93.3% since 1990, owing to fuel switching and reduced sulphur content of fuels. On track to meet 2030 targets (EPA, 2020d).
	Non-methane volatile organic compounds (NMVOCs) emissions			Emissions of non-methane volatile organic compounds (NMVOCs) are increasing, arising from the food and beverage industry and the storage and handling of animal manures and synthetic fertilisers. Emissions of NMVOCs decreased slightly in 2018. Currently slightly off track to meet 2030 emissions target (EPA, 2020d), indicating further measures are required.
	Ammonia emissions			Ammonia emissions are increasing, linked with agriculture. Emissions breached national ceiling under the National Emission Ceilings Directive in 2018 for the third successive year (EPA, 2020d). Currently not on track to meet 2030 emissions target. The underlying drivers are the use of animal manure and nitrogen fertilisers, which can be reduced through widespread adoption of on-farm measures.
	Particulate matter ($PM_{2.5}$ and/or PM_{10}) emissions			Emissions of particulate matter ($PM_{2.5}$) have decreased by 62.8% since 1990, mainly due to fuel switching in the residential and commercial sectors, and improvements in vehicle engine technology. There was a small increase in emissions of particulate matter in 2018, mainly due to increased heating requirements in homes and buildings. Projected to meet 2030 EU emissions target subject to agreed national actions being implemented (EPA, 2020d).
	Overall air assessment			While overall air quality in Ireland is good, there are localised issues with some pollutants (such as particulates) that have serious potential health impacts, resulting in an overall current assessment of 'moderate'. Ireland is generally meeting EU air quality limits but not some WHO guideline values in places, and nitrogen oxides exceedance in 2019 is a warning about not being complacent in tackling air pollution. Not on track to meet National Emission Ceilings Directive targets for ammonia due to emissions from agriculture. Mixed progress in reducing overall emissions from transport and energy. Overall, Ireland's prospect of meeting targets and policy objectives is heavily dependent on agreed national measures being implemented.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
NATURE	**Nature**			
	Conservation status of EU protected habitats			Based on the latest assessments (NWPS, 2019), 15% of EU protected habitats have a favourable conservation status, while 85% have an inadequate or a bad status. In terms of the trends in EU protected habitats, 53% are stable, 46% are declining, and only 2% are improving.
	Conservation status of EU protected species			Based on the latest assessments (NWPS, 2019), 57% of EU protected species have a favourable conservation status; 30% have an inadequate or a bad status. In terms of the trends in EU protected species, 55% are stable, 17% are improving, 15% are declining, and 13% are unknown.
	Status and trends of bird populations			Almost 20% of Ireland's breeding bird species are in long-term decline. Approximately 30% of breeding species populations are stable or have increased over the long term. This includes some relatively recent colonists. Some of our breeding farmland songbirds are under increasing pressures from the modernisation and intensification of agricultural practices. Breeding waders such as the curlew and lapwing have seen a 93% decline in breeding populations over the long term. The populations of over half of wintering birds are declining over the short term, this includes waders and duck species. Ireland's wintering waterbirds may be responding to climate change as many species are showing a north-easterly shift in their range across Europe.
	Butterflies			Butterfly populations are sensitive to changes in climate and land use. The Irish Butterfly Monitoring Scheme, coordinated by the National Biodiversity Data Centre (NBDC), shows that the current long-term trend is of moderate decline. Across 15 common and widespread species, the highest butterfly populations observed since the monitoring scheme began in 2008 were recorded in 2010 and the lowest in 2016. Five species have experienced serious or moderate population declines since 2008, three species have increasing populations, four have stable populations and three are too variable to assign a statistically rigorous trend (NBDC, 2019; Judge and Lysaght, 2020).
	Overall nature assessment			Overall current assessment is 'very poor'. Deteriorating trends dominate, especially for protected habitats. In the absence of far-reaching measures, the outlook is largely not on track to meeting policy objectives.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
WATER	**Water**			
	River water quality			Current assessment is 'poor'. Only 53% of river water bodies have a good or high status (EPA, 2019). Trend shows a mixed picture with some improvements, but notably there have been serious declines in the number of high status sites and an increase in poor status waters. Significant challenges remain to achieving full compliance.
	Lake water quality			Current assessment is 'poor'. Only 50% of lake water bodies have a good or high status (EPA, 2019). Trend shows a mixed picture. Significant challenges remain to achieving full compliance.
	Transitional water quality			Current assessment is 'very poor'. Only 38% of transitional water bodies have a good or high status (EPA, 2019). Trend shows a mixed picture. Significant challenges remain to achieving full compliance.
	Coastal water quality			Current assessment is 'very good', with 80% of coastal water bodies having a good or high status (EPA, 2019). Trend is stable. Largely on track to achieving full compliance but some issues remain.
	Marine environment			The Marine Strategy Framework Directive Article 17 report found that 6 of the 11 MSFD descriptors were compatible with good ecological status, indicating partial compliance (DHLGH, 2020). Trend information is not available. Challenges remain for achieving full compliance.
	Groundwater quality			92% have a good or high status (EPA, 2019). Trend is improving, although there are elevated nitrate concentrations at some monitoring stations, particularly in the south and south-east region, and localised issues with pathogens linked to domestic wastewater treatment systems. The presence of hazardous substances in groundwater is not a widespread water quality issue. Largely on track to achieving full compliance.
	Urban wastewater treatment			Over half (56%) of the wastewater load was not compliant with EU treatment standards in 2019 (EPA, 2020e). Improvements are needed at 113 priority urban areas to eliminate raw sewage, prevent water pollution, protect freshwater pearl mussels and bathing waters and meet EU standards. Trend is improving, but from a low base; progress is slow and significant challenges remain to achieving full compliance.
	Bathing water quality			95% have a sufficient status, 89% have an excellent or a good status (EPA, 2020f). Trend is improving. Largely on track to achieving full compliance with 'sufficient' target, but still below EU average for 'excellent'.

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
	Drinking water quality			Private supplies have poorer compliance and substantially worse drinking water quality than public water supplies with challenges remaining. While compliance is over 99% in public supplies (EPA, 2020h), there is a concern about long-term boil water notices, detections of *Cryptosporidium* and elevated levels of disinfection by-products (THMs), lead and pesticides. As of July 2020, there are 52 public water supplies on the EPA's Remedial Action List. Irish Water's progress at implementing solutions for these supplies has been subject to delays and increasing uncertainty. Remaining issues need to be addressed through upgrade and replacement programmes.
	Overall water assessment			Overall, current assessment is 'poor'. Trends are mixed, with serious declines in pristine river sites. In terms of outlook, significant challenges remain to achieving full compliance and meeting policy objectives.
WASTE AND CIRCULAR ECONOMY	**Waste and the circular economy**			
	Generation of municipal waste			Generation of municipal waste increased in 2018 to 600 kg/person (up from 577 kg/person in 2017) (EPA, 2020e). Mixed trend over past 20 years, correlating closely with variations in disposable income, indicating a failure to decouple waste generation from economic activity. Reducing waste generation will require the implementation of new waste prevention and consumption reduction measures.
	Recycling of municipal waste			Recycling rates have stagnated since 2010 and more recently shown a decline (EPA, 2020e). Waste characterisation studies show that a large share of recyclable waste (packaging, food) is put in the wrong bin and so is not being recycled. On track to meet 2020 target but the much more stringent targets for 2025 and 2030 will pose a challenge.
	Recycling of packaging waste			Meeting current targets but recycling rates for some packaging streams are stagnating or declining and much more stringent targets will apply from 2025 and 2030 (EPA, 2020e). Significant challenge to meet future targets for individual packaging streams, in particular plastic. Waste characterisation studies show that two-thirds of plastic packaging waste presented in kerbside bins is not currently recyclable in Ireland.
	Landfilling of municipal waste			Landfill rates have fallen steadily in Ireland, from 84% in 2001 to just 14% in 2018 (EPA, 2020e). However, meeting the 2030 limit of 10% municipal waste disposed to landfill will be challenging.
	Biodegradable waste diversion from landfill			Currently compliant with 2020 target by a large margin and trend is improving with brown bin roll-out and more widespread mechanical pre-treatment of residual waste prior to landfilling (EPA, 2020e).

	POLICY AREA	CURRENT ASSESSMENT	OUTLOOK	NOTES
	Collection and recovery of electrical and electronic waste			Compliant with current collection and recovery targets; however, significantly increased targets apply from 2019. Rates are gradually improving (EPA, 2020e); expected to achieve compliance with new targets by a close margin.
	Circular (secondary) material use rate			Rates of circular (secondary) material use have remained consistently low in Ireland since 2010 at below 2% compared with an EU average of 11% in 2017 (EC, 2019b).
	Overall waste and circular economy assessment			Overall current assessment is 'poor'; while Ireland is meeting current targets, recycling rates for municipal waste and packaging have levelled off and in some cases declined and waste generation remains high and linked to economic activity, while circular use of material remains very low. Publication of new national waste policy is welcome. Achieving future EU targets and circular economy goals will be dependent on rigorous implementation of waste legislation, policy initiatives and measures.

CURRENT ASSESSMENT: Summary assessment of current environmental performance, policy and implementation in Ireland

	Very poor/significant environmental and/or compliance challenges to address
	Poor/environmental and/or compliance challenges to address
	Moderate/on track generally/local or occasional challenges
	Good/mainly achieving objectives
	Very good/fully achieving objectives

OUTLOOK: Current prospect of meeting policy objectives and/or targets

	Largely not on track to meet policy objectives and targets. Significant challenges remain to achieving full compliance. Systemic and transformative change needed.
	Partially on track to achieving full compliance or measures in place or planned that will improve the situation. However, the outlook is dependent on existing and planned actions, measures and plans being fully implemented and effective.
	Largely on track to achieving full compliance. Measures in place provide prospect of meeting policy objectives and targets.

Overall Assessment of Progress

It is clear from the trends that the scale of improvements being made is insufficient to meet long-term objectives and that, despite policy efforts, the majority of Ireland's agreed environmental targets will not be met.

Since the first edition of Ireland's state of the environment report in 1996, there have been many examples of environmental improvement in Ireland. This is seen especially where problems have been well identified and are manageable and where regulatory and technological solutions have been readily available, such as in the areas of waste management, industrial emissions and wastewater discharges. Further improvements can be achieved through the more effective implementation of existing policies. It is clear from the trends, however, that the scale of improvements being made is insufficient to meet long-term objectives and that, despite policy efforts, the majority of Ireland's environmental targets and commitments will not be met. For climate, biodiversity and water, most targets will not be met in the short to medium term, while for air and waste, although Ireland is meeting many of its current targets, a concerted effort will be needed to achieve the more stringent longer term targets in the future.

Similar to the trend across Europe and globally (EEA, 2019a; UN, 2019), it appears that environmental policy efforts, improvements and efficiency gains in Ireland are being offset by increasing demand, driven by population and economic growth and unsustainable patterns of production and consumption, as well as climate change. These have resulted in an overall deterioration in many aspects of Ireland's environment. The most recent state of the European environment report for 2020 (EEA, 2019a) concludes that European policies have been more effective in improving efficiency than in protecting ecosystems and human health and wellbeing, and the same appears true in Ireland. That report calls for more systemic, transformative policy frameworks to tackle climate breakdown and the biodiversity crisis and to implement sustainable development. The most recent UN GEO-6 report (UN, 2019) makes a similar call for more ambitious and effective policies, including sustainable consumption and production, greater resource efficiency and improved resource management, integrated ecosystem management, and integrated waste management and prevention. The EEA report recommends embracing the 2030 Agenda and the UN SDGs as an overarching framework for policymaking and action, as well as fully implementing existing policies, improving policy coherence and addressing current policy gaps.

Building on these collective findings, with better implementation and more integrated, ambitious policies, many of these issues could be minimised and trends reversed. The suggested enablers for improving the implementation of environmental policy in plans and programmes in Ireland include more effective governance structures, measurable targets, enhanced oversight and enforcement, and greater investment. For improving integration, suggested enablers are more integrated development and land mapping, SEA, collaboration, closing policy gaps, and using new data and evidence to inform policy. The enablers for improving monitoring and public participation include monitoring and reporting on implementation and performance, tracking plans and programmes, greater public awareness and engagement in the entire process and enhanced access to justice.

Chapter Highlights for Environmental Performance, Policy and Implementation

Many of Ireland's agreed environmental targets will not be met in the short term or will be delivered late. Despite progress in some areas, the scale and speed of improvements being made are insufficient to meet long-term EU and national objectives such as those covering water quality, air quality, nature protection, reducing emissions to air and the ambition for a climate-neutral economy and climate neutrality by 2050. To improve implementation, sustained improvements are needed in how the performance of environmental and sectoral plans, policies and strategies are coordinated and tracked, their effectiveness is measured and the outputs of such measurements are fed back into reviews and future updates.

The successes in environmental policy implementation to date, for example around industrial emissions and waste management, were hard won. These successes are being offset by increased levels of population growth, unsustainable patterns of production/consumption and climate change, resulting in a net decline in the state of Ireland's environment. To reverse these trends, Ireland needs to improve the implementation and enforcement of existing environmental legislation and policy at all scales, from national to local levels. This can be supported through more effective governance structures, greater focus on monitoring and performance evaluation, enhanced oversight and enforcement, and higher levels of investment.

Tackling the complex and interlinked challenges facing the environment will require the development of more integrated, coherent and ambitious environmental policy frameworks and a clear national policy position for Ireland's environment.

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